Benedicte Vanwanseele

List of Publications by Year
in descending order

132	3,326	172457	175258
papers	citations	29 h-index	52 g-index

137	137	137	3500
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Strength training for treatment of osteoarthritis of the knee: A systematic review. Arthritis and Rheumatism, 2008, 59, 1488-1494.	6.7	225
2	The association of external knee adduction moment with biomechanical variables in osteoarthritis: A systematic review. Knee, 2009, 16, 303-309.	1.6	200
3	The effects of immobilization on the characteristics of articular cartilage: current concepts and future directions. Osteoarthritis and Cartilage, 2002, 10, 408-419.	1.3	189
4	Knee cartilage of spinal cord-injured patients displays progressive thinning in the absence of normal joint loading and movement. Arthritis and Rheumatism, 2002, 46, 2073-2078.	6.7	165
5	Longitudinal analysis of cartilage atrophy in the knees of patients with spinal cord injury. Arthritis and Rheumatism, 2003, 48, 3377-3381.	6.7	127
6	A review on the mechanical quality of articular cartilage â€“ Implications for the diagnosis of osteoarthritis. Clinical Biomechanics, 2006, 21, 999-1012.	1.2	110
7	Lower limb muscle strengthening does not change frontal plane moments in women with knee osteoarthritis: A randomized controlled trial. Clinical Biomechanics, 2011, 26, 167-174.	1.2	92
8	Effect of children's shoes on gait: a systematic review and metaâ€analysis. Journal of Foot and Ankle Research, 2011, 4, 3.	1.9	92
9	Knee Joint Loading in Healthy Adults During Functional Exercises: Implications for Rehabilitation Guidelines. Journal of Orthopaedic and Sports Physical Therapy, 2018, 48, 162-173.	3.5	71
10	Wireless Tri-Axial Trunk Accelerometry Detects Deviations in Dynamic Center of Mass Motion Due to Running-Induced Fatigue. PLoS ONE, 2015, 10, e0141957.	2.5	66
11	Resistive Exercise for Arthritic Cartilage Health (REACH): A randomized double-blind, sham-exercise controlled trial. BMC Geriatrics, 2009, 9, 1.	2.7	64
12	Long-term changes in the tibia and radius bone mineral density following spinal cord injury. Spinal Cord, 2005, 43, 96-101.	1.9	61
13	Degenerative meniscus tears and mobility impairment in women with knee osteoarthritis. Osteoarthritis and Cartilage, 2007, 15, 701-708.	1.3	59
14	The relationship between knee adduction moment and cartilage and meniscus morphology in women with osteoarthritis. Osteoarthritis and Cartilage, 2010, 18, 894-901.	1.3	56
15	Individual selection of gait retraining strategies is essential to optimally reduce medial knee load during gait. Clinical Biomechanics, 2014, 29, 828-834.	1.2	55
16	Novice runners show greater changes in kinematics with fatigue compared with competitive runners. Sports Biomechanics, 2018, 17, 350-360.	1.6	54
17	Comparison of foot muscle morphology and foot kinematics between recreational runners with normal feet and with asymptomatic over-pronated feet. Gait and Posture, 2017, 54, 290-294.	1.4	49
18	Posterior cruciate ligament deficiency: Biomechanical and biological consequences and the outcomes of conservative treatment. Journal of Science and Medicine in Sport, 2008, 11, 433-443.	1.3	47

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19	Influence of outdoor running fatigue and medial tibial stress syndrome on accelerometer-based loading and stability. Gait and Posture, 2018, 59, 222-228.	1.4	47
20	Frontal Knee Alignment: Three-dimensional Marker Positions and Clinical Assessment. Clinical Orthopaedics and Related Research, 2009, 467, 504-509.	1.5	46
21	Concurrent validity and reliability of wireless instrumented insoles measuring postural balance and temporal gait parameters. Gait and Posture, 2017, 51, 116-124.	1.4	46
22	Knee Cartilage Thickness, T1Ï•and T2 Relaxation Time Are Related to Articular Cartilage Loading in Healthy Adults. PLoS ONE, 2017, 12, e0170002.	2.5	46
23	Progressive resistance training and dynamic alignment in osteoarthritis: A single-blind randomised controlled trial. Clinical Biomechanics, 2011, 26, 71-77.	1.2	44
24	The effect of three surface conditions, speed and running experience on vertical acceleration of the tibia during running. Sports Biomechanics, 2017, 16, 166-176.	1.6	43
25	Dynamic alignment and its association with knee adduction moment in medial knee osteoarthritis. Knee, 2010, 17, 210-216.	1.6	41
26	Post-traumatic glenohumeral cartilage lesions: a systematic review. BMC Musculoskeletal Disorders, 2008, 9, 107.	1.9	40
27	Surface effects on dynamic stability and loading during outdoor running using wireless trunk accelerometry. Gait and Posture, 2016, 48, 220-225.	1.4	38
28	Lateral trunk lean and medializing the knee as gait strategies for knee osteoarthritis. Gait and Posture, 2017, 51, 247-253.	1.4	35
29	Effect of thong style flipâ€flops on children's barefoot walking and jogging kinematics. Journal of Foot and Ankle Research, 2013, 6, 8.	1.9	33
30	Age-Related Changes in Achilles Tendon Stiffness and Impact on Functional Activities: A Systematic Review and Meta-Analysis. Journal of Aging and Physical Activity, 2019, 27, 116-127.	1.0	33
31	Gait adaptations of older adults on an uneven brick surface can be predicted by age-related physiological changes in strength. Gait and Posture, 2018, 61, 257-262.	1.4	32
32	Novel technology in sports biomechanics: some words of caution. Sports Biomechanics, 2021, , 1-9.	1.6	32
33	Machine learning algorithms can classify outdoor terrain types during running using accelerometry data. Gait and Posture, 2019, 74, 176-181.	1.4	30
34	A Machine Learning Approach to Estimate Hip and Knee Joint Loading Using a Mobile Phone-Embedded IMU. Frontiers in Bioengineering and Biotechnology, 2020, 8, 320.	4.1	29
35	Foot muscle morphology is related to center of pressure sway and control mechanisms during single-leg standing. Gait and Posture, 2017, 57, 52-56.	1.4	27
36	Fatigue Prediction in Outdoor Runners Via Machine Learning and Sensor Fusion. , 2018, , .		27

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37	The influence of knee joint geometry and alignment on the tibiofemoral load distribution: A computational study. Knee, 2019, 26, 813-823.	1.6	27
38	Recommendations for statistical analysis involving null hypothesis significance testing. Sports Biomechanics, 2020, 19, 561-568.	1.6	27
39	Test-retest reliability of knee extensor rate of velocity and power development in older adults using the isotonic mode on a Biodex System 3 dynamometer. PLoS ONE, 2018, 13, e0196838.	2.5	26
40	The effect of external ankle support on knee and ankle joint movement and loading in netball players. Journal of Science and Medicine in Sport, 2014, 17, 511-515.	1.3	25
41	Proactive and reactive neuromuscular control in subjects with chronic ankle instability: Evidence from a pilot study on landing. Gait and Posture, 2015, 41, 106-111.	1.4	25
42	Effect of habitual foot-strike pattern on the gastrocnemius medialis muscle-tendon interaction and muscle force production during running. Journal of Applied Physiology, 2019, 126, 708-716.	2.5	24
43	Measuring Lifting Forces in Rock Climbing: Effect of Hold Size and Fingertip Structure. Journal of Applied Biomechanics, 2011, 27, 40-46.	0.8	23
44	Musculoskeletal modelling in dogs: challenges and future perspectives. Veterinary and Comparative Orthopaedics and Traumatology, 2016, 29, 181-187.	0.5	22
45	Musculotendon excursion potential, tendon slack and muscle fibre length: the interaction of the canine gastrocnemius muscle and tendon. Journal of Anatomy, 2018, 233, 460-467.	1.5	22
46	Optimal mechanical forceâ€velocity profile for sprint acceleration performance. Scandinavian Journal of Medicine and Science in Sports, 2022, 32, 559-575.	2.9	22
47	Data fusion of body-worn accelerometers and heart rate to predict VO2max during submaximal running. PLoS ONE, 2018, 13, e0199509.	2.5	21
48	Bilateral differences in muscle fascicle architecture are not related to the preferred leg in jumping athletes. European Journal of Applied Physiology, 2017, 117, 1453-1461.	2.5	20
49	Differences in foot muscle morphology and foot kinematics between symptomatic and asymptomatic pronated feet. Scandinavian Journal of Medicine and Science in Sports, 2019, 29, 1766-1773.	2.9	20
50	Distalâ€toâ€proximal joint mechanics redistribution is a main contributor to reduced walking economy in older adults. Scandinavian Journal of Medicine and Science in Sports, 2021, 31, 1036-1047.	2.9	19
51	In-shoe multi-segment foot kinematics of children during the propulsive phase of walking and running. Human Movement Science, 2015, 39, 200-211.	1.4	17
52	Adding an arch support to a heel lift improves stability and comfort during gait. Gait and Posture, 2017, 58, 94-97.	1.4	17
53	In vivo precision of quantitative shoulder cartilage measurements, and changes after spinal cord injury. Magnetic Resonance in Medicine, 2004, 51, 1026-1030.	3.0	16
54	Reliability and Agreement of 3D Trunk and Lower Extremity Movement Analysis by Means of Inertial Sensor Technology for Unipodal and Bipodal Tasks. Sensors, 2019, 19, 141.	3.8	16

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55	Knee loading patterns in a simulated netball landing task. European Journal of Sport Science, 2013, 13, 475-482.	2.7	15
56	Sprint force-velocity profiles in soccer players: impact of sex and playing level. Sports Biomechanics, 2021, 20, 947-957.	1.6	15
57	Ultrasound-Based Optimal Parameter Estimation Improves Assessment of Calf Muscleâ€“Tendon Interaction During Walking. Annals of Biomedical Engineering, 2020, 48, 722-733.	2.5	15
58	An age-adapted plyometric exercise program improves dynamic strength, jump performance and functional capacity in older men either similarly or more than traditional resistance training. PLoS ONE, 2020, 15, e0237921.	2.5	15
59	Functional movement assessment by means of inertial sensor technology to discriminate between movement behaviour of healthy controls and persons with knee osteoarthritis. Journal of NeuroEngineering and Rehabilitation, 2020, 17, 65.	4.6	15
60	Achilles Subtendon Structure and Behavior as Evidenced From Tendon Imaging and Computational Modeling. Frontiers in Sports and Active Living, 2020, 2, 70.	1.8	14
61	Mechanics of Jazz Shoes and Their Effect on Pointing in Child Dancers. Journal of Applied Biomechanics, 2012, 28, 242-248.	0.8	13
62	The effect of external ankle support on the kinematics and kinetics of the lower limb during a side step cutting task in netballers. BMC Sports Science, Medicine and Rehabilitation, 2014, 6, 42.	1.7	13
63	Gait kinetics in children with clubfeet treated surgically or with the Ponseti method: A meta-analysis. Gait and Posture, 2018, 66, 94-100.	1.4	13
64	Children's rearfoot and midfoot motion while walking in school shoes. Journal of Foot and Ankle Research, 2011, 4, .	1.9	12
65	Age-related differences in rate of power development exceed differences in peak power. Experimental Gerontology, 2018, 101, 95-100.	2.8	12
66	Do Stretch-Shortening Cycles Really Occur in the Medial Gastrocnemius? A Detailed Bilateral Analysis of the Muscle-Tendon Interaction During Jumping. Frontiers in Physiology, 2019, 10, 1504.	2.8	12
67	Information from dynamic length changes improves reliability of static ultrasound fascicle length measurements. PeerJ, 2017, 5, e4164.	2.0	12
68	An optimized design of in-shoe heel lifts reduces plantar pressure of healthy males. Gait and Posture, 2016, 47, 43-47.	1.4	11
69	Multiview 3D Markerless Human Pose Estimation from OpenPose Skeletons. Lecture Notes in Computer Science, 2020, , 166-178.	1.3	11
70	Biofeedback in Partial Weight Bearing: Usability of Two Different Devices from a Patientâ€™s and Physical Therapistâ€™s Perspective. PLoS ONE, 2016, 11, e0165199.	2.5	11
71	Joint power generation differentiates young and adult sprinters during the transition from block start into acceleration: a cross-sectional study. Sports Biomechanics, 2017, 16, 452-462.	1.6	10
72	The morphology of foot soft tissues is associated with running shoe type in healthy recreational runners. Journal of Science and Medicine in Sport, 2018, 21, 686-690.	1.3	10

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73	Effect of a prehop on the muscle-tendon interaction during vertical jumps. Journal of Applied Physiology, 2018, 124, 1203-1211.	2.5	10
74	Accelerometer Based Data Can Provide a Better Estimate of Cumulative Load During Running Compared to GPS Based Parameters. Frontiers in Sports and Active Living, 2020, 2, 575596.	1.8	10
75	Inertial Sensor-to-Segment Calibration for Accurate 3D Joint Angle Calculation for Use in OpenSim. Sensors, 2022, 22, 3259.	3.8	10
76	Triceps surae muscle force potential and force demand shift with altering stride frequency in running. Scandinavian Journal of Medicine and Science in Sports, 0, , .	2.9	10
77	A quantitative study of humeral cartilage in individuals with spinal cord injury. Spinal Cord, 2008, 46, 129-134.	1.9	9
78	An EMG assessment of Front Row Rugby Union Scrummaging. International Journal of Performance Analysis in Sport, 2014, 14, 225-237.	1.1	9
79	Towards the Monitoring of Functional Status in a Free-Living Environment for People with Hip or Knee Osteoarthritis: Design and Evaluation of the JOLO Blended Care App. Sensors, 2020, 20, 6967.	3.8	9
80	AMIE: Automatic Monitoring of Indoor Exercises. Lecture Notes in Computer Science, 2019, , 424-439.	1.3	9
81	Dose-response effects of forefoot and arch orthotic components on the center of pressure trajectory during running in pronated feet. Gait and Posture, 2022, 92, 212-217.	1.4	9
82	The effect of interventions anticipated to improve plantar intrinsic foot muscle strength on fallâ€related dynamic function in adults: a systematic review. Journal of Foot and Ankle Research, 2022, 15, 3.	1.9	9
83	Movement Quality Parameters during Gait Assessed by a Single Accelerometer in Subjects with Osteoarthritis and Following Total Joint Arthroplasty. Sensors, 2022, 22, 2955.	3.8	9
84	Treatment of Forefoot Problems in Older People: A Randomized Clinical Trial Comparing Podiatric Treatment With Standardized Shoe Advice. Annals of Family Medicine, 2014, 12, 432-440.	1.9	8
85	Age-related decline in leg-extensor power development in single- versus multi-joint movements. Experimental Gerontology, 2018, 110, 98-104.	2.8	8
86	Reliability of 3D Lower Extremity Movement Analysis by Means of Inertial Sensor Technology during Transitional Tasks. Sensors, 2018, 18, 2638.	3.8	8
87	Influence of heel design on lower extremity biomechanics and comfort perception in overground running. Journal of Sports Sciences, 2021, 39, 232-238.	2.0	8
88	Biofeedback in Partial Weight Bearing: Validity of 3 Different Devices. Journal of Orthopaedic and Sports Physical Therapy, 2016, 46, 993-1001.	3.5	7
89	Muscleâ€“tendon unit length changes differ between young and adult sprinters in the first stance phase of sprint running. Royal Society Open Science, 2018, 5, 180332.	2.4	7
90	Discriminant validity of 3D joint kinematics and centre of mass displacement measured by inertial sensor technology during the unipodal stance task. PLoS ONE, 2020, 15, e0232513.	2.5	7

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91	Quantitative Analysis of Local Changes in Patellar Cartilage in Spinal Cord Injured Subjects. Clinical Orthopaedics and Related Research, 2007, 456, 98-102.	1.5	6
92	Characterisation of the responsive properties of two running-specific prosthetic models. Prosthetics and Orthotics International, 2017, 41, 141-148.	1.0	6
93	Energy cost of running instability evaluated with wearable trunk accelerometry. Journal of Applied Physiology, 2018, 124, 462-472.	2.5	6
94	Habitual foot strike pattern does not affect simulated Triceps Surae muscle metabolic energy consumption during running. Journal of Experimental Biology, 2019, 222, .	1.7	6
95	Effect of acceleration on the rate of power development and neural activity of the leg extensors across the adult life span. European Journal of Applied Physiology, 2019, 119, 781-789.	2.5	6
96	Development and evaluation of a leaflet containing shoe advice: a randomized controlled trial. Family Practice, 2014, 31, 267-272.	1.9	5
97	Multi-segment spine and hip kinematics in asymptomatic individuals during standardized return from forward bending versus functional box lifting. Journal of Electromyography and Kinesiology, 2019, 49, 102352.	1.7	5
98	The Use of a Single Trunk-Mounted Accelerometer to Detect Changes in Center of Mass Motion Linked to Lower-Leg Overuse Injuries: A Prospective Study. Sensors, 2021, 21, 7385.	3.8	5
99	Variation in the location of the shoe sole flexion point influences plantar loading patterns during gait. Journal of Foot and Ankle Research, 2014, 7, 20.	1.9	4
100	Train High Eat Low for Osteoarthritis study (THE LO study): protocol for a randomized controlled trial. Journal of Physiotherapy, 2015, 61, 217.	1.7	4
101	Changes in running kinematics and kinetics after a 12-week running program for beginners. Sports Biomechanics, 2022, 21, 201-211.	1.6	4
102	Joint kinematics alone can distinguish hip or knee osteoarthritis patients from asymptomatic controls with high accuracy. Journal of Orthopaedic Research, 2022, 40, 2229-2239.	2.3	4
103	Intraâ€assessor reliability and measurement error of ultrasound measures for foot muscle morphology in older adults using a tabletâ€based ultrasound machine. Journal of Foot and Ankle Research, 2022, 15, 6.	1.9	4
104	Can the Output of a Learned Classification Model Monitor a Personâ€™s Functional Recovery Status Post-Total Knee Arthroplasty?. Sensors, 2022, 22, 3698.	3.8	4
105	Process evaluation of podiatric treatment of patients with forefoot pain. Journal of Foot and Ankle Research, 2013, 6, 32.	1.9	3
106	Differences in multi-segmental spine kinematics between patients with different stages of axial spondyloarthritis and healthy controls. Musculoskeletal Science and Practice, 2021, 53, 102368.	1.3	3
107	The effects of foot orthosis and low-dye tape on lower limb joint angles and moments during running in individuals with pes planus. Gait and Posture, 2022, 96, 154-159.	1.4	3
108	The Reliability and Validity of a Three-Camera Foot Image System for Obtaining Foot Anthropometrics. Journal of Applied Biomechanics, 2010, 26, 349-356.	0.8	2

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109	Effect of sports shoes on children's vertical jump performance and midfoot and ankle kinetics. Footwear Science, 2013, 5, S58-S59.	2.1	2
110	Ageâ€related differences in vastus lateralis fascicle behavior during fast accelerative legâ€extension movements. Scandinavian Journal of Medicine and Science in Sports, 2020, 30, 1878-1887.	2.9	2
111	Inter-segmental coordination of the spine is altered during lifting in patients with ankylosing spondylitis. Medicine (United States), 2020, 99, e18941.	1.0	2
112	Muscle-tendon properties and functional gait outcomes in clubfoot patients with and without a relapse compared to typically developing children. Gait and Posture, 2022, 93, 47-53.	1.4	2
113	P 074 - A comparison of foot kinematics in children with clubfeet and healthy controls using the Oxford Foot Model. Gait and Posture, 2018, 65, 353-354.	1.4	1
114	Variation of actin filament length in dogs. Journal of Anatomy, 2019, 234, 694-699.	1.5	1
115	The energetic, kinematic and kinetic responses to load carried on the back, on the head and in a doublepack. Ergonomics, 2021, 64, 1191-1204.	2.1	1
116	CONTACT FORCE RECONSTRUCTION ON VIBRATING SURFACES. , 2020, , .		1
117	Impact of Gender and Feature Set on Machine-Learning-Based Prediction of Lower-Limb Overuse Injuries Using a Single Trunk-Mounted Accelerometer. Sensors, 2022, 22, 2860.	3.8	1
118	Injury Prevalence In Australian Professional Golfers. Medicine and Science in Sports and Exercise, 2010, 42, 420-421.	0.4	0
119	Children's functional performance barefoot and in sports shoes. Journal of Foot and Ankle Research, 2012, 5, .	1.9	0
120	Effect of sports shoes on midfoot power generation in children while walking and running. Footwear Science, 2013, 5, S55-S56.	2.1	0
121	Cartilage volume and thickness but not biochemical properties relate to joint loading during gait in healthy controls. Osteoarthritis and Cartilage, 2016, 24, S112.	1.3	0
122	Tibiofemoral joint loading during therapeutic exercises and activities of daily living: Implications for rehabilitation in osteoarthritis and cartilage repair surgery. Osteoarthritis and Cartilage, 2016, 24, S111-S112.	1.3	0
123	Selecting gait modification strategies for patients with knee osteoarthritis. Osteoarthritis and Cartilage, 2016, 24, S112-S113.	1.3	0
124	Effects of habitual running shoe type on foot soft tissuesâ€™ morphology. Footwear Science, 2017, 9, S63-S64.	2.1	0
125	Assessment of specific muscle tension in dogs through functional electrical stimulation of the gastrocnemius muscle. Research in Veterinary Science, 2017, 113, 33-39.	1.9	0
126	Contact Force Reconstruction from the Lower-Back Accelerations during Walking on Vibrating Surfaces. Vibration, 2021, 4, 205-231.	1.9	0

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127	Evaluation of functional muscle anatomy scalability in the canine hind limb. Journal of Veterinary Medicine Series C: Anatomia Histologia Embryologia, 2021, 50, 637-644.	0.7	0
128	Axial Spondyloarthritis is associated with changes in lumbosacral loading during daily activities. Clinical Biomechanics, 2021, 85, 105347.	1.2	0
129	Functional Effects of Shoes. , 2017, , 1-10.		0
130	Functional Effects of Shoes. , 2018, , 1423-1432.		0
131	Muscle tuning and preferred movement path: do we need a paradigm shift or should we redefine the old? â€“ comment on Nigg et al.. Current Issues in Sport Science, 0, , .	0.1	0
132	Vision-Based Marker-Less Spatiotemporal Gait Analysis by Using a Mobile Platform: Preliminary Validation. Communications in Computer and Information Science, 2019, , 126-141.	0.5	0